Stavis Seafoods, Inc.

7 Channel Street, Boston, MA 02210.

March 24, 2106 Close Out Briefing

The following items are observations, areas of concern or requests further information.

The area in the vicinity of the Principal Access (Double) Doors leading into the Storage/Maintenance area on first floor and Ammonia Machinery Room on second floor. Ammonia standards talked about at the out briefing are from the ANSI/IIAR 2 standards.

Principal Access Door

Need proper warning sign under the Audio/Visual alarm above the principal exterior doors.

Need proper signs above the Emergency Ventilation and Emergency Machinery Shutdown switch's/buttons.

Need proper Signs on the Principal access Doors, including the following signage:

1. Facility lacked any Refrigeration Machinery Room sign,

2. Facility had inadequate Caution Ammonia sign,

3. Facility lacked any Caution Eye and Ear Protection Required sign in this area,

4. Facility had inadequate NFPA 704 Ammonia Fire Diamond 3-3-0, Warning for indoor ammonia refrigeration equipment sign.

Need tight fitting doors.

Need to update how to access the emergency switches for shutting down the ammonia equipment and to activate the emergency ventilation system.

Check to make sure the Red light above the outside door is both an Audio and Visual alarm.

Storage/Maintenance area on first floor

Propylene Glycol system not marked.

Should not have chemicals or materials under the wood stairs.

Flammable Storage cabinet needs to be grounded.

Cutting Torch cart needs to be secured.

Charging station under wooded stairs has frayed wires coming out of the unit.

None of the chemicals or products stored in this area had any secondary. containment.

Need to segregate materials for incompatibility.

Need to separate into Waste, Hazardous Waste and Universal Waste.

Need a plumbed Eye Wash fountain/Shower Station. The Facility had an inadequate eye wash only station, which was empty.

Ammonia Machinery Room on Second Floor

Need to do Non Destructive/Integrity testing on the ammonia system.

Insulation on pipes, Control Pressure receiver and dump tank all show signs of being breached, including cracked insulation, rust, ice, and biological growth on equipment. Insulation should be removed for inspection and then replaced.

All ammonia piping needs to be painted and properly labeled.

Need two ammonia detectors for 25 ppm and 150 ppm detection level.

Need tight fitting exterior doors.

The two access doors need a gate to prevent a person from falling out the opening.

Need doors labeled properly.

Identify Emergency shut off valves such as the King Valves.

Need to be able to access the Emergency Shut Off valves (King Valves).

Need permanent sign securely attached and easily accessible on the ammonia refrigeration system displaying: name and address of the installer; refrigerant number and amount of refrigerant in the system; lubricant identity and amount; and field test pressure(s) applied.

Piping and Instrumentation Diagram – P&ID diagram should be moved from the back of the Door and placed either on the wall as you enter or on the wall near the top of the steps.

All ammonia system vessels need to be marked properly.

Need to protect pipes from bumps

Need to have a permanent structure to access the ammonia equipment on the roof, rather than an unsecured ladder.

Need add at least two more wind socks, which should be located 3 meters above roof line.

High Stage Compressor 1 had electric wire leads that were not properly secured.

Need an Eye Wash fountain/Shower Station

Need to check why louvers are closed when they should be open with the emergency ventilation on.

Company supplied a diagram showing the location of floor drains in the building, and we were told that the floor drains connected to the storm drains that discharge to the harbor.

We told the company office they should notify the National Response Center ("NRC") at 800-424- 8802 because of the oil that was released during the ammonia incident.

Who is the designated operator of the Ammonia system?

Need a copy of the original ammonia system calculations done by Stavis Seafoods, Inc.'s contractor, American Refrigeration Company and new ammonia system calculations for equipment currently at the facility. Reason for new ammonia system calculation is that a new larger condenser was installed on the roof within the last two years.

Need Pressure Relief Valves installation and replacement records

Need ventilation calculations for all phase of operations.

Need copy of contract with American Refrigeration Company, Inc.

Need copy of the Emergency Plan(s) for all regulations.

Emergency Planning and Community Right-to-Know – EPCRA

Supply copy of Tier 2 for 2015, along with proof of submission to the Local Fire department, LEPC – Local Emergency Planning Committee and SERC – State Emergency Response Commission

Need inventory of all chemicals, materials and products that have SDS – Safety Data Sheet.

Two materials of special note are the amount of Lead Acid Batteries in the electric forklifts and trucks and the amount of Propylene Glycol solution.

OSHA

This a continuing process in which there will be follow up requests for information and interviews.

Massachusetts Department Public Safety - Boilers

Continuing to monitor the situation.

Boston Fire Department

http://www.cityofboston.gov/fire/forms/

Need to file an Annual Permit Application

Need to file Hazardous Material Process or Processing – Form FP 300

Need copy of Sprinkler and Fire alarm report

Boston Police Department

Told the group that this ammonia release event was ruled an Industrial Accident.